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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,867	02/23/2004	Ronald G. Fink	29154.0001	9486
65039 SHUTTS & BC	7590 07/30/2009 WEN. LLP		EXAMINER	
100 S. ASHLE		MAYEKAR, KISHOR		
SUITE 1500 TAMPA, FL 33	3602		ART UNIT	PAPER NUMBER
•			1795	
			MAIL DATE	DELIVERY MODE
			07/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Communication		Application	on No.	Applicant(s)				
		10/784,86	37	FINK ET AL.				
	Office Action Summary	Examine		Art Unit				
		Kishor Ma	yekar	1795				
Period fo	The MAILING DATE of this communication or Reply	n appears on the	e cover sheet with the c	correspondence a	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING IS IN 1997. THE MAILING IS OF IT IS A COMMON THE MAILING IS OF IT IS	IG DATE OF THE FR 1.136(a). In no evon. period will apply and w statute, cause the app	HIS COMMUNICATION ent, however, may a reply be tinular to the source of	N. nely filed the mailing date of this of D (35 U.S.C. § 133).	·			
Status								
1) 又	Responsive to communication(s) filed on	04 May 2009						
-	Responsive to communication(s) filed on <u>04 May 2009</u> . This action is FINAL . 2b) This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٥/ك	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims	·						
· · _								
	Claim(s) <u>1-53</u> is/are pending in the application.							
	4a) Of the above claim(s) <u>1-17 and 33-47</u> is/are withdrawn from consideration.							
′—	5) Claim(s) is/are allowed. 6) Claim(s) <u>18-32 and 48-53</u> is/are rejected.							
	Claim(s) is/are objected to.							
-	Claim(s) are subject to restriction a	and/or election r	equirement					
		and/or election i	equirement.					
Applicat	on Papers							
9)□	The specification is objected to by the Exa	miner.						
10)	The drawing(s) filed on is/are: a)] accepted or b)	objected to by the l	Examiner.				
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	ınder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
2) Notice (3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-94 mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	8)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate				

DETAILED ACTION

Response to Amendment

1. The amendment of 4 May 2009 has been entered. Claims 18-22, 25, 32 and 48 have been amended and claims 1-17 and 33-47 have been withdrawn. Claims 18-32 and 48-53 are pending in this application with claims 18 and 48 being independent claims.

Claim Rejections - 35 USC § 103

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 18-23 and 27-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Say et al. (US 6,063,343) in view of Speer '963 and Kim (WO 02/102,497 A1), all references cited in the last Office action. Say's invention is directed to a device for photocatalytic purification. Say discloses in an embodiment as shown in Fig. 11 a device comprising a UV light source and a one-piece catalytic target structure surrounding the UV light source, wherein the UV light source is a germicidal lamp emitting primarily at 254 nm (Example 1) and wherein the catalytic target structure includes a surface having pleating and surrounds the UV light source (c. 10, l. 14-28). To the reaction with hydrate at the surface of the catalytic target structure, since Say discloses in the Examples the

exposing of the catalytic target structure to the UV light source in the presence of water, the reaction is inherently in Say's teachings. The differences between Say and the above claims are that Say is silent to the UV light source with the recited UV wavelength, and the recited mechanically coupled arrangement of the catalytic target structure to the UV light source.

As to the first difference, Speer teaches in a device for treating fluids via photolytic and photocatalytic reactions the provision of the recited UV light source (c. 6, l. 31-46). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Say's teachings as shown by Speer because the selection of any of known equivalent UV light sources as shown by Speer would have been within the level of ordinary skill in the art.

As to the second difference, Kim teaches in a device for air purification the arrangement of a photocatalytic target structure to a UV light source such that the UV light source is mounted between a pair of support and the photocatalytic target structure is supported by the pair of support with the UV light source positioned therein (p. 7, 1. 29-35). The pair of the support reads on the recited mechanically coupled arrangement. As such the selection of any of known equivalent supports to commonly support Say's catalytic target structure and UV light source would have been within the level of ordinary skill in the art.

As to the subject matter of claim 9, Say discloses it in Example 2.

As to the subject matter of claim 20, Say discloses it in c. 4, l. 35-44.

As to the subject matter of claim 21, Say discloses it in Fig. 10.

As to the subject matter of each of claims 22 and 23, Say discloses it in c. 4, l. 7-9.

As to the subject matter of each of claims 27-32, Speer teaches the limitation (c.

8, 1. 16-18 and 30-36). The subject matter as a whole would have been obvious to one

having ordinary skill in the art at the time the invention was made to have modified Say's

teachings as shown by Speer because this would protect the UV light source from the

fluid.

4. Claims 24-26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Say

'343 in view of Speer '963 and Kim '497 as applied to claims 18-23 and 27-32 above, and

further in view of Miller (US 6,053,968). Say as applied above further discloses the

provision of sensors to warn a user of the non-operational UV light source where the

sensor is a photodiode and may generate an automatic service notification (paragraph

crossing c. 7 and 8). The difference between the references as applied above and the

instant claims is the provision the recited fiber optic cable. Miller, another reference

cited in the last Office action, teaches in a device for fluid purification the provision of an

indicator for indicating operational status of a UV light source (c. 5, 1. 41-46). The subject

matter as a whole would have been obvious to one having ordinary skill in the art at the

time the invention was made to have modified the references' teachings as shown by Miller

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because the selection of any of known equivalent sensors for indicating the operational of the UV light source would have been within the level of ordinary skill in the art. The same is applied to claims 25 and 26 since Miller teaches that the indicator is optically shielded to prevent direct exposure to UV light.

5. Claims 48 and 49 **stand** rejected under 35 U.S.C. 103(a) as being unpatentable over Say '343 in view of Speer '963, Kim '497 and Miller '968, for the same reasons as stated in paragraphs #3 and #4 above and further of Say's teachings in c. 5, 1. 52-65.

As to the subject matter of claim 50, since Say discloses in example different input power, it appears that Say's power supply is adjustable.

6. Claims 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Say '343 in view of Speer '963, Kim '497 and Miller '968 as applied to claims 48 and 49 above, and further in view of Schaible et al. (US 6,972,415 B2). Say as applied above further discloses the provision of sensors to warn a user of the non-operational UV light source where the sensor is a photodiode and may generate an automatic service notification (paragraph crossing c. 7 and 8). The differences between the references as applied above and the instant claims are the limitation recited in each of the instant claims. Schaible teaches in a system for treating fluid with UV light the limitations (Fig. 1). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the

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time the invention was made to have modified the references' teachings as shown by Schaible because the selection of any of known equivalent sensor arrangements would have been within the level of ordinary skill in the art.

Response to Arguments

7. Applicant's arguments filed 4 May 2009 have been fully considered but they are not persuasive because they have been addressed in the paragraphs as set forth above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have guestions on

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access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kishor Mayekar/ Primary Examiner, Art Unit 1795